excellent preservative solution for many, principally marine animals.

TEMPERATURE OF THE ROCK IN THE MAGDALA SHAFT, VICTORIA.

BY N. DE MIKLOUHO-MACLAY.

Having ascertained that no observations of the temperature of rock have yet been made in the shaft of Magdala (the deepest mine in Australia) and being able to spare two days during my last stay in Melbourne, I went on April 4th to Stawell, provided with four thermometers, which Mr. R. L. T. Ellery, the Government Astronomer of Victoria, was kind enough to lend me for this occasion.

I do not find it necessary to mention here all the details of this excursion, and will give only the results of my observations; but I have to observe, that two holes of about 8 feet deep and  $1\frac{1}{2}$  inch in diameter were drilled in the rock (blue schist) on purpose to sink the thermometers into the rock, in the depth of 1,662 feet and 2002 feet, from the surface, while a third thermometer was introduced in the last rod of the diamond drill (2759 feet), which was not at work during the night hours.\*

Two of the thermometers were read the first time after remaining in the rock for seven hours, the second time after eight hours; the third thermometer in the diamond drill only once after remaining in the rock for also eight hours.

The results are near and interesting enough, but would be more correct *i. e.*, more valuable, if selfregistering thermometers, which I could not obtain in Melbourne, had been used.

<sup>\*</sup> The diamond drill has since ceased work in the Magdala Shaft, having bored 521 feet below the bottom of the shaft, or to a total depth of 3,013 feet, or 2,232 feet below the level of the sea.

## 580 TEMPERATURE OF ROCK IN THE MAGDALA SHAFT, VICTORIA,

бти APRIL.	7 a.m.	3-10 p.m. 3-10 p.m.   Air temperature in the Shaft. Air temperature of the the Shaft.   The Shaft. Temperature of the the Shaft.   The shaft. Temperature of the the Shaft.   The shaft. The shaft.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
		Air temperature in the Shaft.	49°, 0 F. (9°, 5 C.)  76° 0 F. (24°, 3 C.) 78° 0 F. (25°, 5 C.) 
4TH APRIL.	10.30 p.m.	Temperature of the Rock. Therm. re- maining 7 hours in the rock.	
		Air temperature in the Shaft.	62°, 6 F. (17°, 0 C.)  83°, 0 F. (28°, 4 C.) 
	3·10 p.m. Air temperature in the Shaft.		69°, 0 F. (20°, 0 C.) 78°, 0 ., (25°, 0) 79°, 0 ., (36°, 0) 81°, 0 ., (27°, 0) 81°, 0 ., (27°, 0) 81°, 0 (27°, 0) 
Surface			

## NOTES AND EXHIBITS.

Mr. Brazier exhibited a specimen of *Astreopora* and a large *Dolium* from the Harbour, and the two species of *Melania* described in his paper.

Mr. Stephen exhibited Fossil leaves from a Tertiary Deposit near Newstead, in reference to which Mr. C. E. Wilkinson read an extract from page 87 of Mineral Statistics of New South Wales for 1880.

WEDNESDAY, JUNE 29TH, 1881.

The President, Dr. J. C. Cox, F.L.S., in the Chair.

MEMBERS ELECTED.

P. A. O'Shanesy, F.L.S., Emerald, Rockhampton.

H. A. Whittell, Esq., Survey Department.

## DONATIONS.

Report of the Botanic Garden, Adelaide, 1880.

Archives Neerlandaiser des Sciences Haarlem, Vol. 15, Parts 3, 4 and 5.

Report of Zoological Station, Naples, 1880.

Verhandlungen of Royal Zoological and Botanical Society, Vienna, Volo 29 and 30.

Proceedings of the Natural History Society of Prussian Rhineland and Westphalia for 1879 and 1880. Bonn.

Annales de la Societe Meteorologique do Belgique, 1876-77-79.